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NOD4 Antibody

Catalog # ASC11190

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q86WI3
Other Accession	NP_115582, 116268109
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	204595
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NOD4 antibody can be used for detection of NOD4 by Western blot at 1 g/mL. Antibody can also be used for immunocytochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	84166
Other Names	Protein NLRC5, Caterpiller protein 16.1, CLR16.1, Nucleotide-binding oligomerization domain protein 27, Nucleotide-binding oligomerization domain protein 4, NLRC5, NOD27, NOD4
Target/Specificity	NLRC5; NOD4 antibody is predicted to not cross-react with other members of the NOD family of proteins.
Reconstitution & Storage	NOD4 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	NOD4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NLRC5
Synonyms	NOD27, NOD4
Function	Probable regulator of the NF-kappa-B and type I interferon signaling pathways. May also regulate the type II interferon signaling pathway. Plays a role in homeostatic control of innate immunity and in antiviral defense mechanisms.

Cellular Location	Cytoplasm
Tissue Location	Expressed in spleen, thymus, lung, brain, tonsil, heart and prostate.

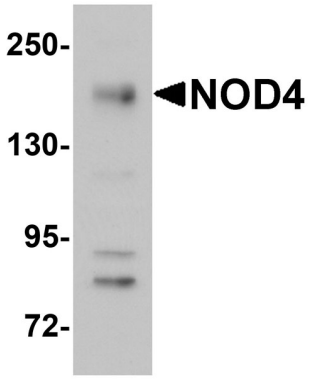
Background

NOD4 Antibody: NOD4 is a member of the NOD (nucleotide-binding oligomerization domain) family, a group of proteins that are involved in innate immune defense. NOD4 contains a CARD-like domain, a central NOD domain and a large LRR region. NOD4, an IFN-gamma-inducible nuclear protein, plays a role in homeostatic control of innate immunity and in antiviral defense mechanisms. As a key negative regulator of NF-κB and type I interferon signaling, NOD4 may be a useful target for manipulating immune responses against infectious or inflammation-associated diseases, including cancer.

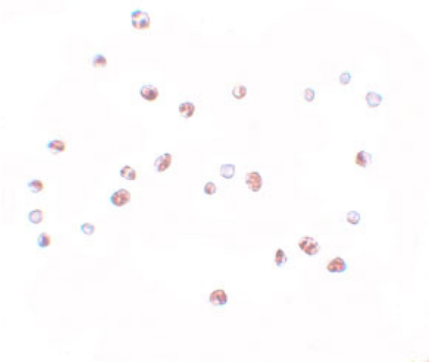
References

Kufer TA, Banks DJ, and Philpott DJ. Innate immune sensing of microbes by Nod proteins. Ann. NY Acad. Sci. 2006; 1072:19-27.
Benko S, Magalhaes JG, Philpott DJ, et al. NLRC5 limits the activation of inflammatory pathways. J. Immunol. 2010; 185:1681-91.
Meissner TB, Li A, Biswas A, et al. NLR family member NLRC5 is a transcriptional regulator of MHC class I genes. Proc. Natl. Acad. Sci. USA 2010; 107:13794-9.
Cui J, Zhu L, Xia X, et al. NLRC5 negatively regulates the NF-kappaB and type I interferon signaling pathways. Cell 2010; 141:483-96.

Images

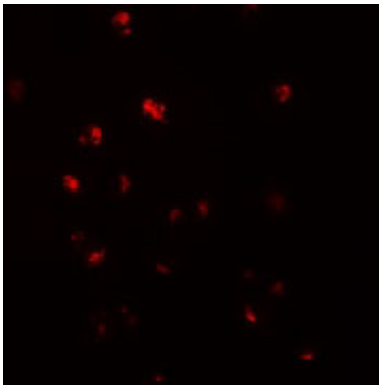


Western blot analysis of NOD4 in EL4 cell lysate with NOD4 antibody at 1 µg/mL.



Immunocytochemistry of NOD4 in HeLa cells with NOD4 antibody at 10 µg/mL.

Immunofluorescence of NOD4 in HeLa cells with NOD4 antibody at 20 µg/mL.



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